WAMC Lab Template
Math Concept(s): Discretionary Spending
Source / Text: Financial Algebra - Cengage
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Attach the following documents:

- Lab Instructions
- Rubric and/or Assessment Tool

Short Description (Be sure to include where in your instruction this lab takes place):
This lab is to have student follow up on their learning of Chapter 1 section 1-3 as they move to completing the chapter. After this lab students will finish the chapter work then students will take this data and their other gathered data from chapter 1 to begin graphing data on discretionary spending.

This lab will allow students to gather information about their spending habits. This lab will last one week. Students will record everything they spend money on and then classify each purchase into their classification for spending. At the end of the week they will enter their data into an Excel Spreadsheet and classify each purchase into up to 10 categories. This will lead to an understanding of discretionary and essential spending.

Lab Plan
Lab Title: Discretionary Spending

Prerequisite skills: Financial Algebra chapters 1-1, 1-2, 1-3.

Lab objective: Students will be able to gather data, categorize and analyze their data to ascertain whether their spending is either discretionary or essential spending.

Standards: *(Note SPECIFIC relationship to Science, Technology, and/or Engineering)*
Mathematics K–12 Learning Standards:
> A-SSE Interpret the structure of expressions
> A-SSE Write expressions in equivalent forms to solve problems.
> A-CED Create equations that describe numbers or relationships.
> F-IF Interpret functions that arise in applications in terms of the context.
> F-IF Analyze functions using different representations.

Standards for Mathematical Practice:
> 1-8

K-12 Learning Standards - ELA (Reading, Writing, Speaking & Listening):
> Reading
> 1.1 Use vocabulary (word meaning) strategies to comprehend text.
> 1.2 Build vocabulary through wide reading
> 2.1 Demonstrate evidence of reading comprehension.

2.2 Understand and apply knowledge of text components to comprehend text.

3.1 Read to learn new information

3.3 Read for career applications

Writing

1.3 Apply writing convention; know and apply correct spelling, grammar, sentence structure, punctuation, and capitalization

2.1 Write for different audiences

2.2 Write for different purposes, such as telling stories, presenting analytical responses to literature, persuading, conveying technical information, completing a team project, and explaining concepts and procedures

Speaking & Listening

1.1 Initiate and participate effectively in a range of collaborative discussions (one-on- one, in groups, and teacher-led) with diverse partners on grades 9-12 topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively.

1.1 Integrate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, orally) in order to make informed decisions and solve problems, evaluating the credibility and accuracy of each source.

K-12 Science Standards

HS-ETS1-4. Use a computer simulation to model the impact of proposed solutions to a complex real-world problem with numerous criteria and constraints on interactions within and between systems relevant to the problem.

Technology

1.2.1 Communicate and collaborate to learn with others.

1.3.2 Locate and organize information from a variety of sources and media

2.2.1 Develop skills to use technology effectively

Leadership/21st Century Skills:

21st Century Interdisciplinary themes (Check those that apply to the above activity.)
X   Global Awareness   X   Financial/Economic/Business/Entrepreneurial Literacy   ☐   Civic Literacy
☐   Health/Safety Literacy   ☐   Environmental Literacy

21st Century Skills (Check those that students will demonstrate in the above activity.)

LEARNING AND INNOVATION	INFORMATION, MEDIA & TECHNOLOGY SKILLS	LIFE & CAREER SKILLS	Productivity and Accountability
Creativity and Innovation	**Information Literacy**	**Flexibility and Adaptability**	X Manage Projects
☐ Think Creatively	☐ Access and Evaluate Information	X Adapt to Change	X Produce Results
☐ Work Creatively with Others	X Use and manage Information	X Be Flexible	**Leadership and Responsibility**
☐ Implement Innovations	**Media Literacy**	**Initiative and Self-Direction**	☐ Guide and Lead Others
Critical Thinking and Problem Solving	☐ Analyze Media	X Manage Goals and Time	☐ Be Responsible to Others
X Reason Effectively	X Create Media Products	X Work Independently	
☐ Use Systems Thinking	**Information, Communications and Technology (ICT Literacy)**	X Be Self-Directed Learners	
X Make Judgments and Decisions	☐ Apply Technology Effectively	**Social and Cross-Cultural**	
X Solve Problems		☐ Interact Effectively with Others	
Communication and Collaboration		☐ Work Effectively in Diverse Teams	
☐ Communicate Clearly			
☐ Collaborate with Others			

<u>Teacher Preparation: (What materials and set-up are required for this lab?)</u>

Materials

    Data collection form

    Chromebooks

    Excel Spreadsheet

Set-Up Required:

    Informed Parent Consent for students

<u>Lab Organization Strategies:</u>

Leadership (Connect to 21st Century Skills selected):

    Communicate clear

    Access and evaluate information

    Use and manage information

    Apply technology effectively

    Self-directed learners

Cooperative Learning:

    Working individually

Expectations:

    Students will gather data on their spending (including what family spends) on each individual over a week and then input and categorize their data on spending.

Timeline:

    7-11 class days

<u>Post Lab Follow-Up/Conclusions:</u>

Discuss real world application of learning from lab

    The real-world application for this lab is for students to become aware of their spending. They will ascertain which type of spending they have done. As for the results of this lab students will be able to begin to understanding of budgeting.

Career Applications

    Budget directors, banking, retail managers

Optional or Extension Activities

    A follow up lab after completing the Chapter 1 would be graphing.

Discretionary Spending Lab

The purpose of this lab is to help students gain a better understanding of how discretionary and essential spending differs and how to identify the difference between the two types of spending.

Lab objective: Students will be able to gather data, categorize and analyze their data to ascertain whether their spending is either discretionary or essential spending.

Instructions:

1. Each student will be responsible for recording all spending on their behalf for a seven (7) full days. Each student will record the date, how much was spent, the items that were bought, and keep the receipt for those purchases.

2. Students have collected their data they will record that data into an Excel Spreadsheet. They would record the date, purchase items, money spent.

3. Once the data has been recorded students will the determine what categories they have entered. For example some categories includes clothing, food, cell phone expense, etc. Then do an analysis of the categories as t whether their spending is discretionary or essential spending and why the decide how they categorize items.

4. Students will create a presentation of their data to show how their data is considered to be discretionary or essential spending.

5. Students will need to keep receipts so students can further break down your purchases for a later lesson to further breakdown the individual items purchased as it will be used to extend this lesson further into specific categories.

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Discretionary Spending Lab Rubric

Name:_____ Period: _____ Date:_____

	4. Distinguished	3. Proficient	2. Apprentice	1. Novice
Data Collection: Students collecting their spending data for seven days	Student has collected data for all seven days.	Student has collected data for five or six days.	Student has collected data for three or four days.	Student has collected data for less than three days
Data Categorizing: Students organizing their data into categories.	Student has organized all data into seven or more categories	Student has organized all data into five or six categories	Student has organized all data into three or four categories	Student has organized all data into three or less categories
Oral Presentation: Content: Presentation of their data to class	All content directly related to the topic. Content was thoroughly developed and demonstrated detailed knowledge of the topic. Opinions were supported by fact wherever possible.	Content directly related to the topic. Included many details that demonstrated knowledge of the topic. Most opinions were supported by facts.	Had difficulty explaining how the content and topic relate. Many opinions were not factually supported.	Presentation did not relate to topic. Included few details and relied heavily upon unsupported opinion.

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